

Title (en)

LITHIUM AND VANDIUM OXIDE $\text{Li}_{1+a}\text{V}_3\text{O}_8$ (0,1 ≤ a ≤ 0,25) METHOD FOR THE PREPARATION THEREOF

Title (de)

LITHIUMVANADIUMOXID $\text{Li}_{1+a}\text{V}_3\text{O}_8$ (0,1 ≤ a ≤ 0,25) UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

OXYDE DE LITHIUM ET DE VANDIUM $\text{Li}_{1+a}\text{V}_3\text{O}_8$, 0 ≤ a ≤ 0,25, PROCEDE POUR SA PREPARATION

Publication

EP 1831110 B1 20151209 (FR)

Application

EP 05809319 A 20051018

Priority

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- FR 0411310 A 20041022

Abstract (en)

[origin: WO2006045922A1] The invention relates to a lithium and vanadium oxide. The oxide corresponds to formula $\text{Li}_{1+a}\text{V}_3\text{O}_8$ (0,1 ≤ a ≤ 0,25) and is made up of agglomerates of small needles whose length L is 400 - 1000 nm, whose width is such that $10 < L < 100$ and whose thickness e is such that $10 < L/e < 100$. It is obtained by a method consisting in preparing a precursor gel by bringing V_2O_5 and a Li precursor into contact with each other, the amounts of which being selected in such a way that the ratio of concentrations $[\text{V}_2\text{O}_5]/[\text{Li}]$ ranges from 1.15 to 1.5, and in subjecting the gel to thermal treatment consisting of a first stage at 80 °C - 150 °C during 3 hours - 15 days, and a second stage between 250 °C and 350 °C, during 4 mins to 1 hour, in a nitrogen or argon atmosphere. Applications: positive-electrode active matter.

IPC 8 full level

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